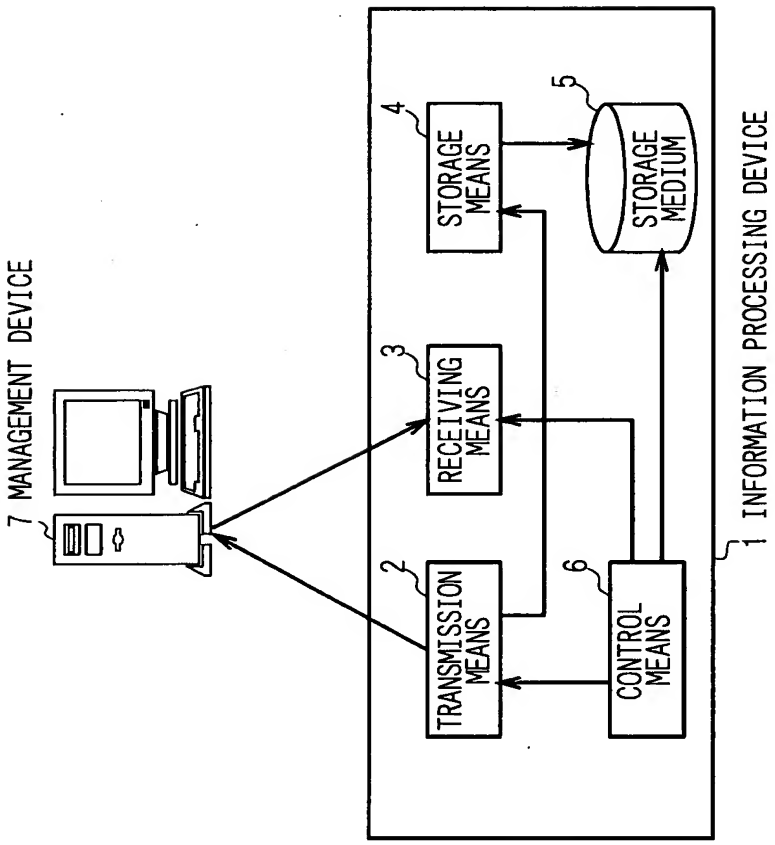
7 MANAGEMENT DEVICE
1 INFORMATION PROCESSING DEVICE
2
TRANSMISSION MEANS
3
RECEIVING MEANS
4
STORAGE MEANS
5
STORAGE MEDIUM
6
CONTROL MEANS

FIG.1

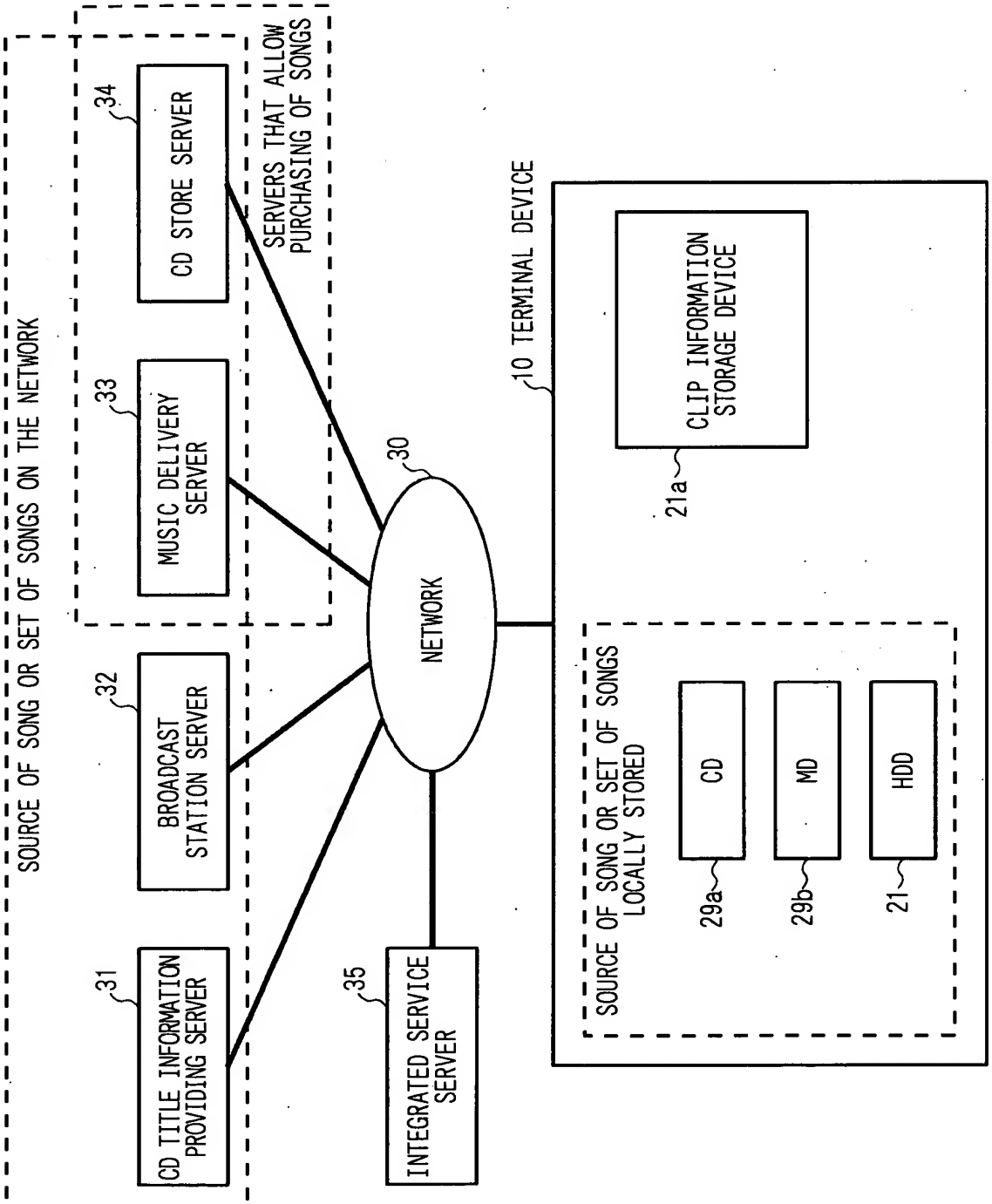
SOURCE OF SONG OR SET OF SONGS ON THE NETWORK
SERVERS THAT ALLOW PURCHASING OF SONGS
CD STORE SERVER
34
MUSIC DELIVERY SERVER
33
BROADCAST STATION SERVER
32
CD TITLE INFORMATION PROVIDING SERVER
31
INTEGRATED SERVICE SERVER
35
NETWORK
30
10 TERMINAL DEVICE
CLIP INFORMATION STORAGE DEVICE
21a
SOURCE OF SONG OR SET OF SONGS LOCALLY STORED
CD
MD
HDD
29a
29b
21

FIG. 2

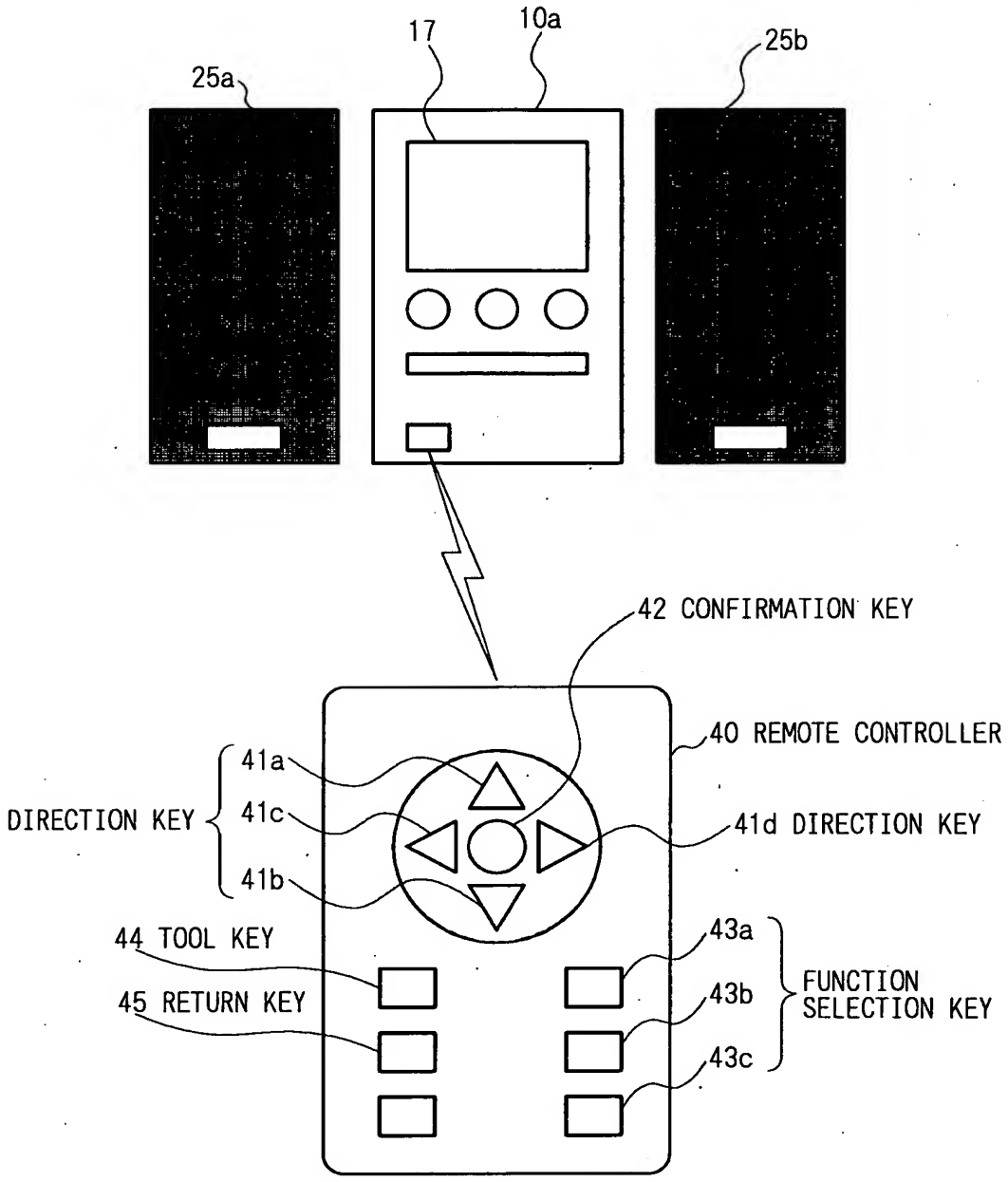
17
10a
25a
25b
42 CONFIRMATION KEY
40 REMOTE CONTROLLER
41a
DIRECTION KEY
41c
41b
41d DIRECTION KEY
44 TOOL KEY
45 RETURN KEY
43a
43b
43c
FUNCTION SELECTION KEY

FIG.3

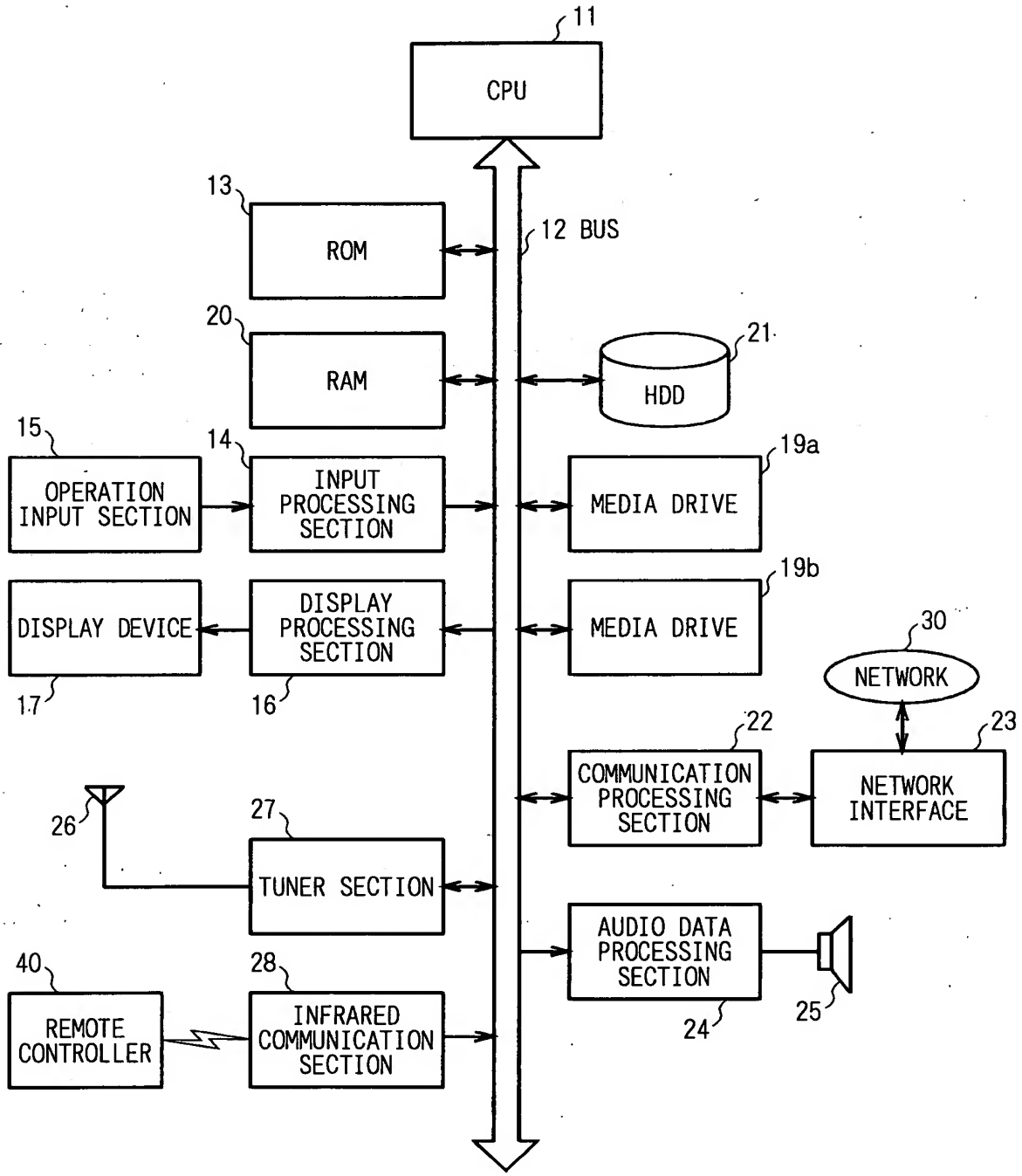
11
CPU
13
ROM
12 BUS
20
RAM
21
HDD
15
OPERATION INPUT SECTION
14
INPUT PROCESSING SECTION
19a
MEDIA DRIVE
DISPLAY DEVICE
DISPLAY PROCESSING SECTION
19b
MEDIA DRIVE
17
16
30
NETWORK
22
23
COMMUNICATION PROCESSING SECTION
NETWORK INTERFACE
26
27
TUNER SECTION
AUDIO DATA PROCESSING SECTION
40
28
REMOTE CONTROLLER
INFRARED COMMUNICATION SECTION
24
25

FIG.4

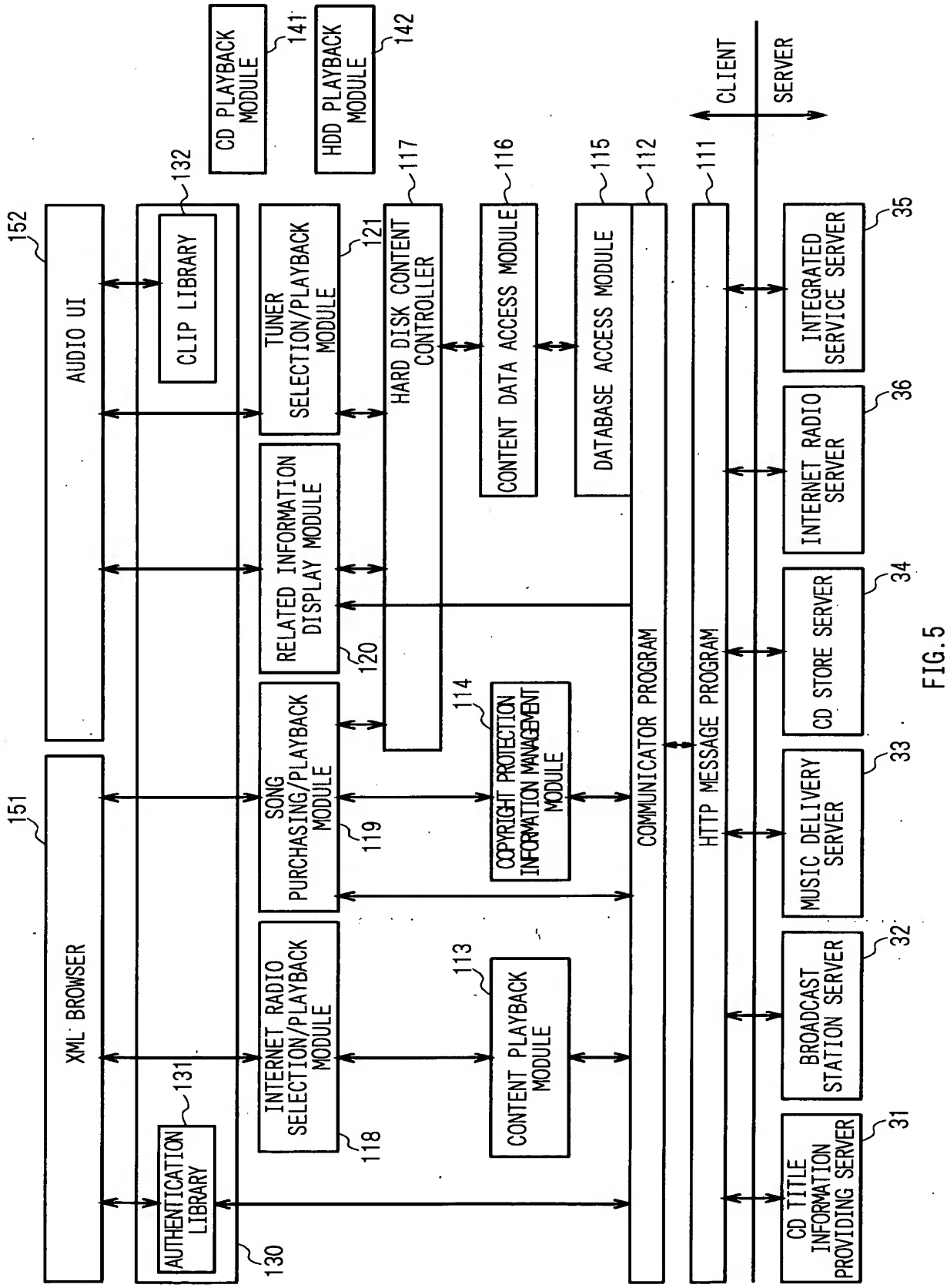
CLIENT
SERVER
AUDIO UI
152
CLIP LIBRARY
132
CD PLAYBACK MODULE
141
HDD PLAYBACK MODULE
142
TUNER SELECTION/PLAYBACK MODULE
121
HARD DISK CONTENT CONTROLLER
117
CONTENT DATA ACCESS MODULE
116
DATABASE ACCESS MODULE
115
COMMUNICATOR PROGRAM
112
HTTP MESSAGE PROGRAM
111
INTEGRATED SERVICE SERVER
35
INTERNET RADIO SERVER
36
CD STORE SERVER
34
MUSIC DELIVERY SERVER
33
BROADCAST STATION SERVER
32
CD TITLE INFORMATION PROVIDING SERVER
31
RELATED INFORMATION DISPLAY MODULE
120
SONG PURCHASING/PLAYBACK MODULE
119
COPYRIGHT PROTECTION INFORMATION MANAGEMENT MODULE
114
INTERNET RADIO SELECTION/PLAYBACK MODULE
118
CONTENT PLAYBACK MODULE
113
XML BROWSER
151
AUTHENTICATION LIBRARY
131
130

FIG. 5

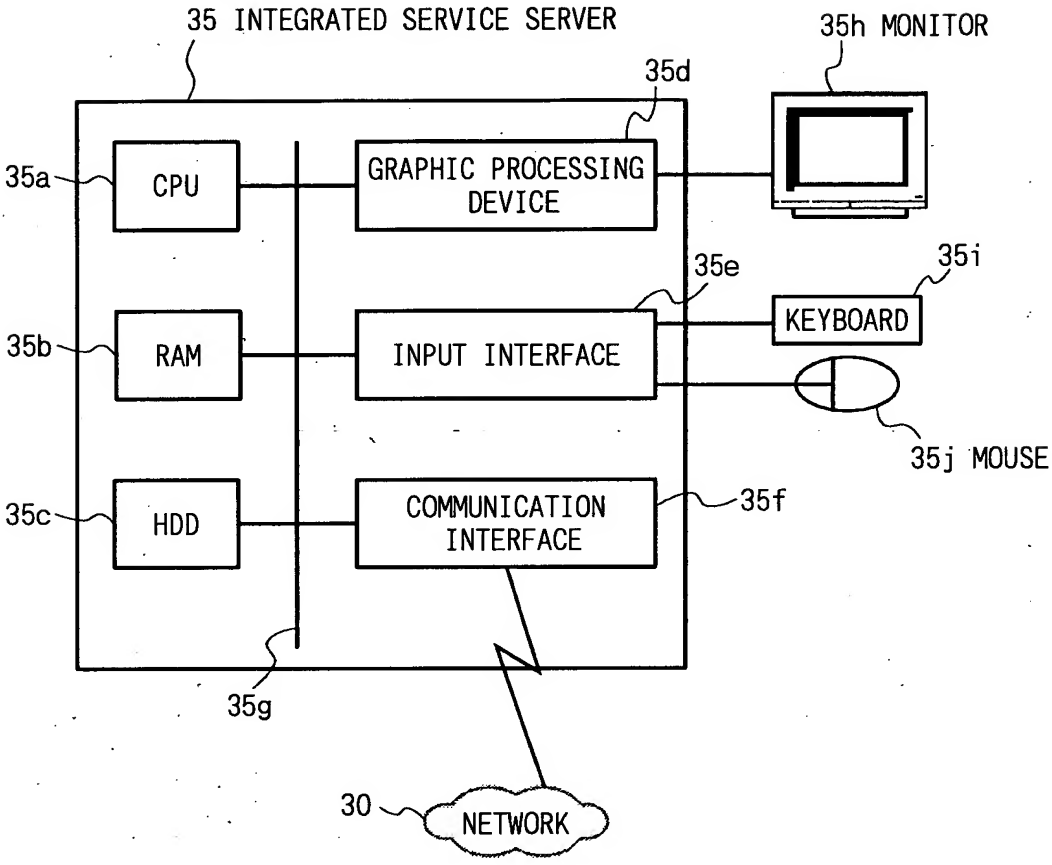
35 INTEGRATED SERVICE SERVER
35h MONITOR
35d
35a
CPU
GRAPHIC PROCESSING DEVICE
35e
35i
KEYBOARD
35b
RAM
INPUT INTERFACE
35j MOUSE
35c
HDD
COMMUNICATION INTERFACE
35f
35g
30
NETWORK

FIG.6

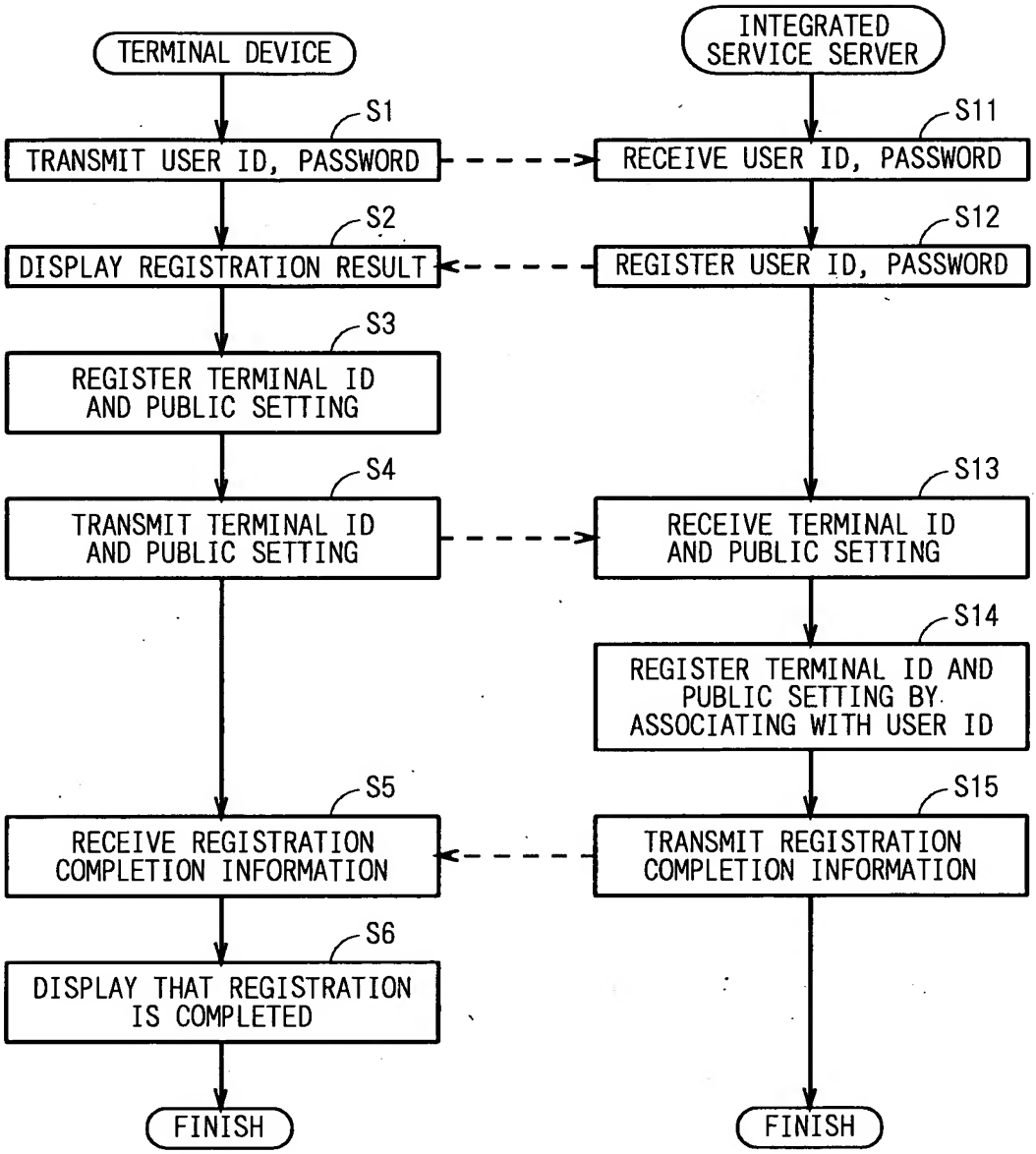
TERMINAL DEVICE
INTEGRATED SERVICE SERVER
S1
TRANSMIT USER ID, PASSWORD
S11
RECEIVE USER ID, PASSWORD
S2
DISPLAY REGISTRATION RESULT
S12
REGISTER USER ID, PASSWORD
S3
REGISTER TERMINAL ID AND PUBLIC SETTING
S4
TRANSMIT TERMINAL ID AND PUBLIC SETTING
S13
RECEIVE TERMINAL ID AND PUBLIC SETTING
S14
REGISTER TERMINAL ID AND PUBLIC SETTING BY ASSOCIATING WITH USER ID
S5
RECEIVE REGISTRATION COMPLETION INFORMATION
S15
TRANSMIT REGISTRATION COMPLETION INFORMATION
S6
DISPLAY THAT REGISTRATION IS COMPLETED
FINISH
FINISH

FIG.7

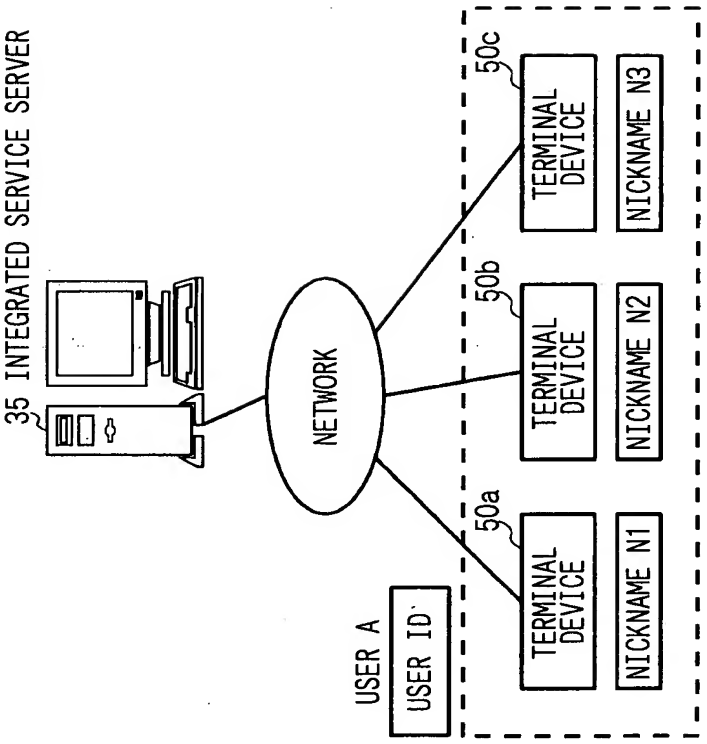
35 INTEGRATED SERVICE SERVER
NETWORK
USER A
USER ID
50a
TERMINAL DEVICE
NICKNAME N1
50b
TERMINAL DEVICE
NICKNAME N2
50c
TERMINAL DEVICE
NICKNAME N3

FIG.8

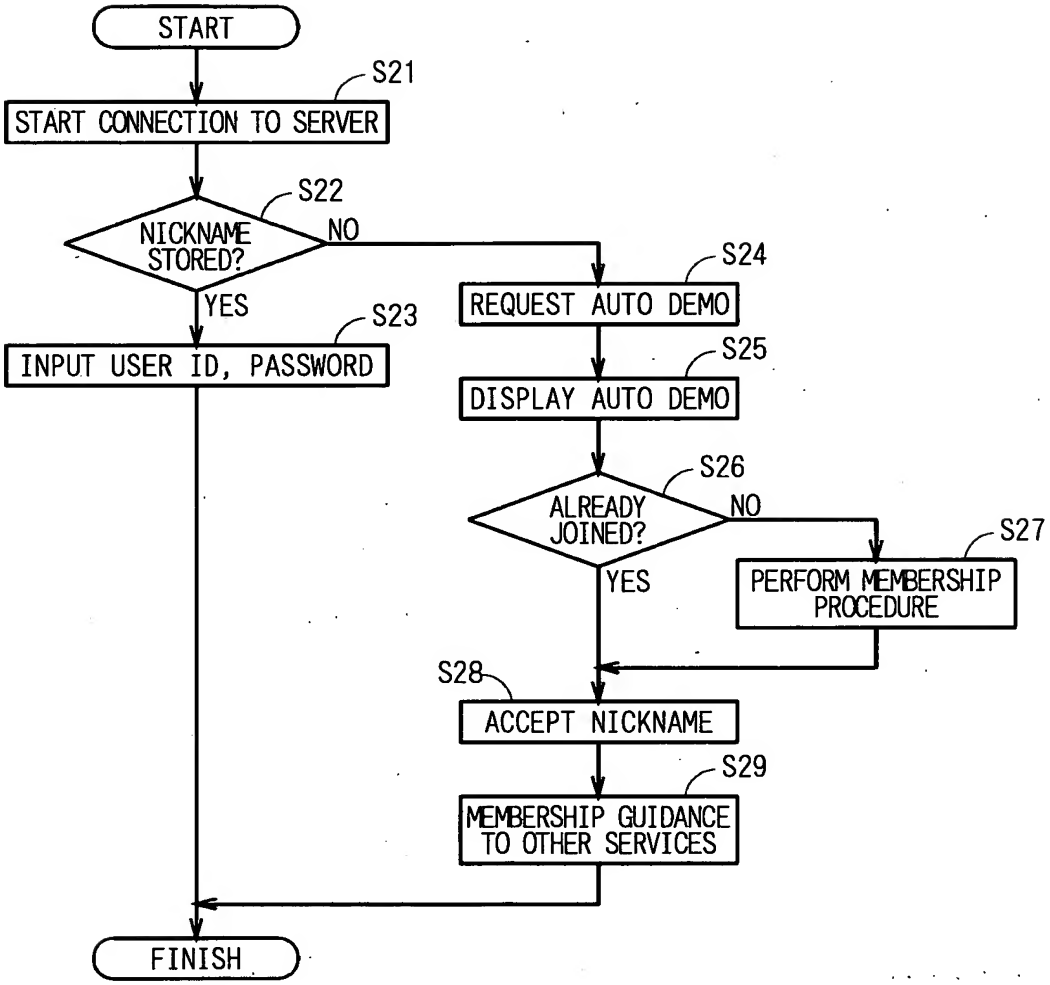
START
S21
START CONNECTION TO SERVER
S22
NICKNAME STORED?
NO
YES
S23
INPUT USER ID, PASSWORD
S24
REQUEST AUTO DEMO
S25
DISPLAY AUTO DEMO
S26
ALREADY JOINED?
NO
YES
S27
PERFORM MEMBERSHIP PROCEDURE
S28
ACCEPT NICKNAME
S29
MEMBERSHIP GUIDANCE TO OTHER SERVICES
FINISH

FIG.9

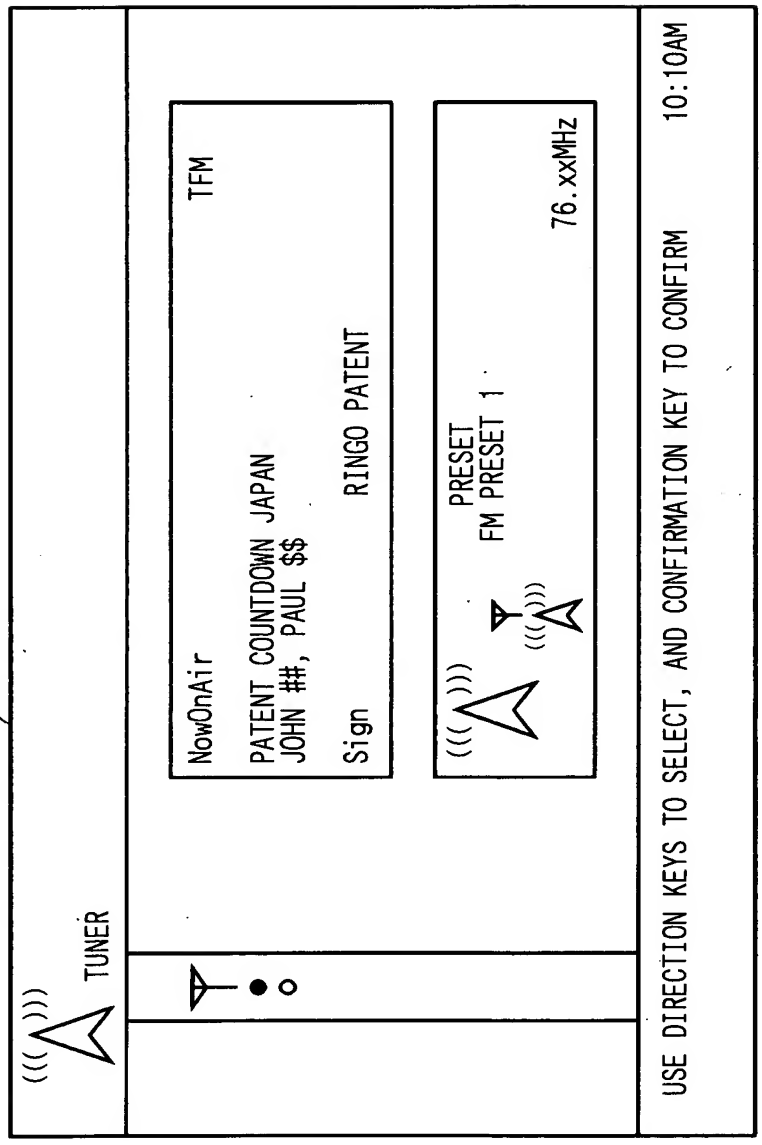
61
TUNER
NowOnAir
TFM
PATENT COUNTDOWN JAPAN
JOHN ##, PAUL $$
RINGO PATENT
Sign
PRESET
FM PRESET 1
76.xxMHz
USE DIRECTION KEYS TO SELECT, AND CONFIRMATION KEY TO CONFIRM
10:10AM

FIG.10

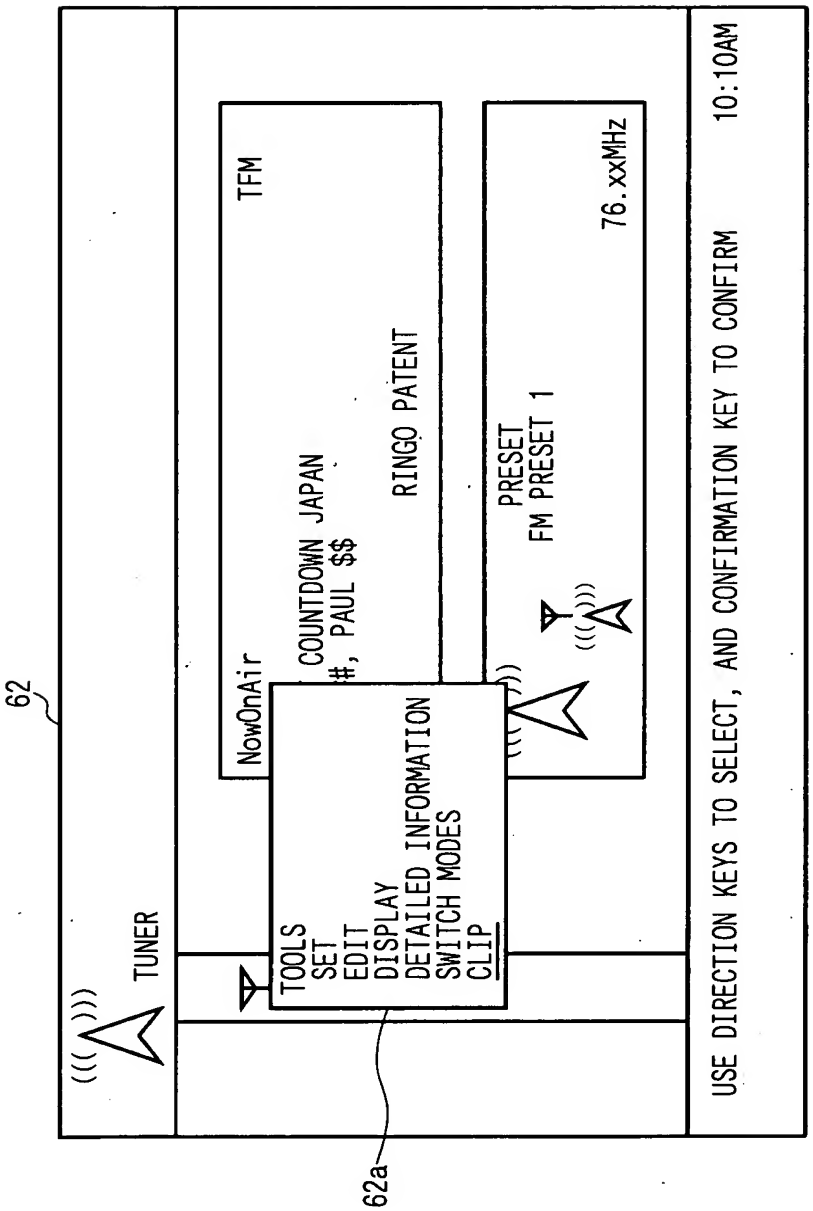
62
TUNER
TOOLS
SET
EDIT
DISPLAY
DETAILED INFORMATION
SWITCH MODES
CLIP
62a
NowOnAir
COUNTDOWN JAPAN
#, PAUL $$
RINGO PATENT
TFM
PRESET
FM PRESET 1
76.xxMHz
USE DIRECTION KEYS TO SELECT, AND CONFIRMATION KEY TO CONFIRM
10:10AM

FIG.11

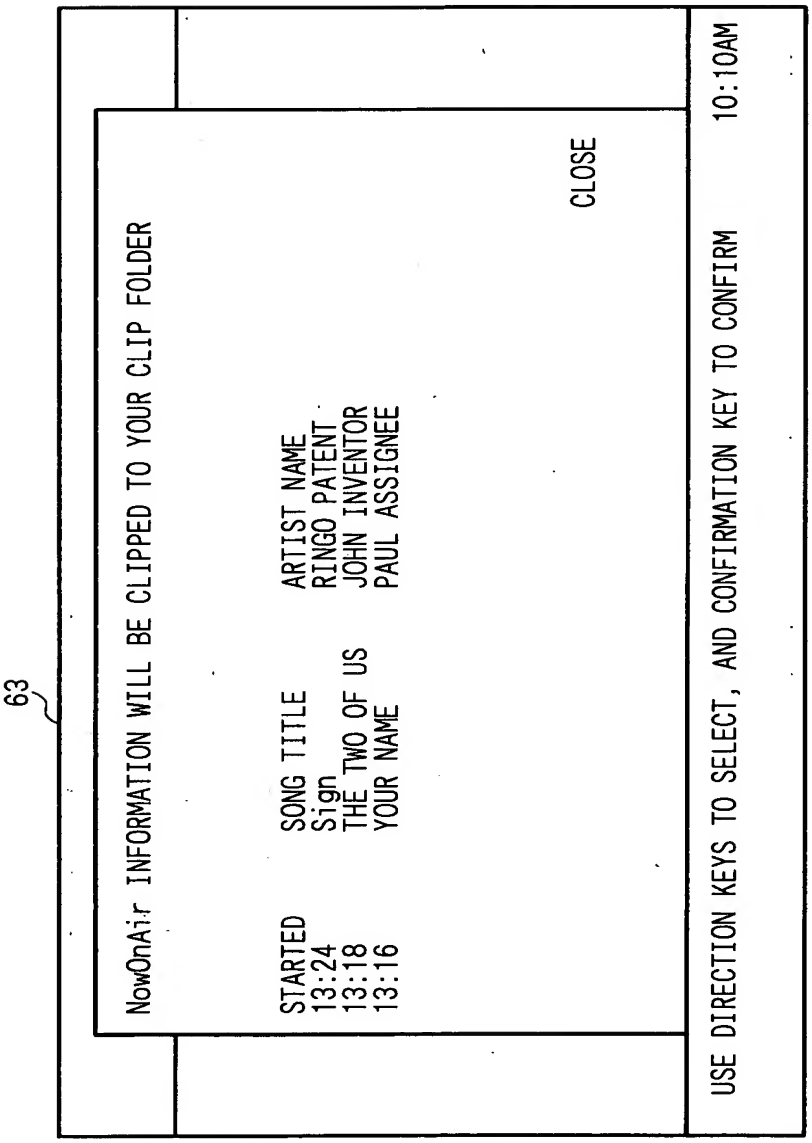
63
NowOnAir INFORMATION WILL BE CLIPPED TO YOUR CLIP FOLDER
STARTED
13:24
13:18
13:16
SONG TITLE
Sign
THE TWO OF US
YOUR NAME
ARTIST NAME
RINGO PATENT
JOHN INVENTOR
PAUL ASSIGNEE
CLOSE
USE DIRECTION KEYS TO SELECT, AND CONFIRMATION KEY TO CONFIRM
10:10AM

FIG.12

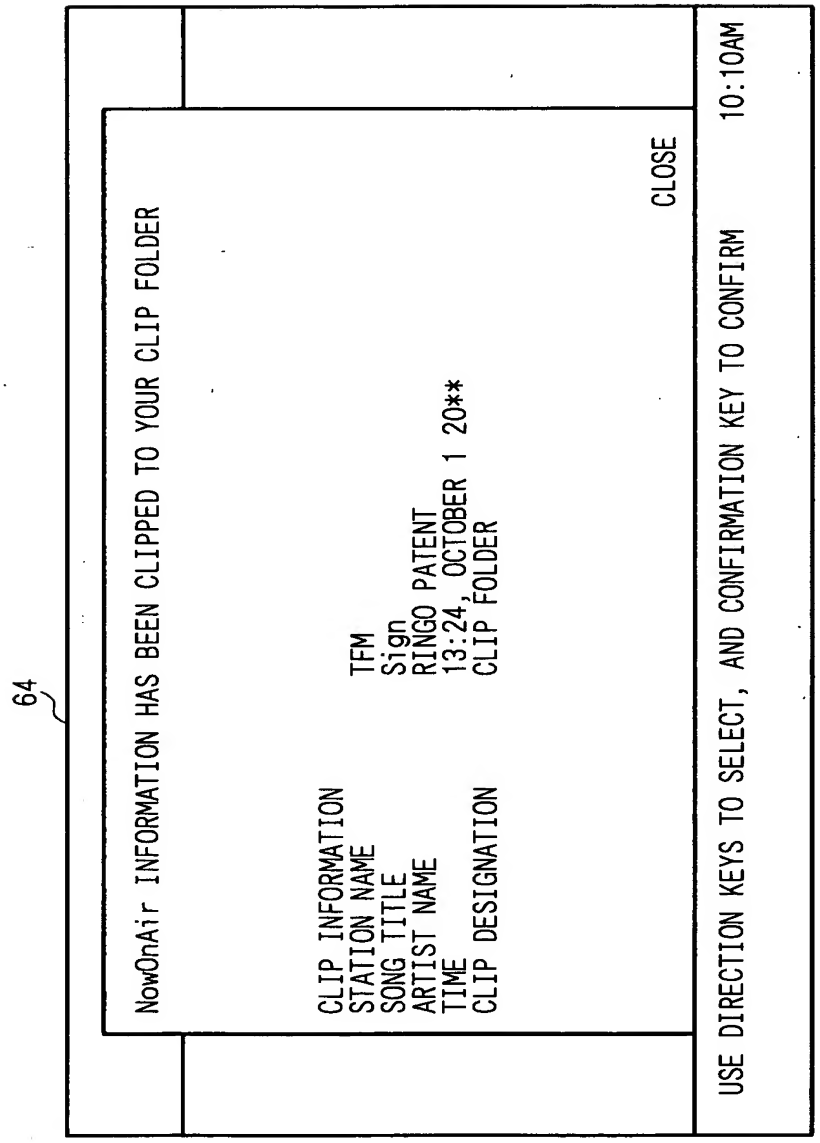
64
NowOnAir INFORMATION HAS BEEN CLIPPED TO YOUR CLIP FOLDER
CLIP INFORMATION
STATION NAME
SONG TITLE
ARTIST NAME
TIME
CLIP DESIGNATION
TFM
Sign
RINGO PATENT
13:24, OCTOBER 1 20**
CLIP FOLDER
CLOSE
USE DIRECTION KEYS TO SELECT, AND CONFIRMATION KEY TO CONFIRM
10:10AM

FIG.13

EXPLANATION OF REFERENCE NUMERALS

1...INFORMATION PROCESSING DEVICE, 2...TRANSMISSION MEANS, 3...RECEIVING MEANS, 4...STORAGE MEANS, 5...STORAGE MEDIUM, 6...CONTROL MEANS, 7...MANAGEMENT DEVICE, 10, 50a-50c...TERMINAL DEVICE, 11, 35a...CPU, 12...BUS, 13...ROM, 14...INPUT PROCESSING SECTION, 15...OPERATION INPUT SECTION, 16...DISPLAY PROCESSING SECTION, 17...DISPLAY DEVICE, 19a, 19b...MEDIA DRIVE, 20...RAM, 21...HDD, 22...COMMUNICATION PROCESSING SECTION, 23...NETWORK INTERFACE, 24...AUDIO DATA PROCESSING SECTION, 25...SPEAKER, 28...INFRARED COMMUNICATION SECTION, 30...NETWORK, 31...CD TITLE INFORMATION PROVIDING SERVER, 32...BROADCAST STATION SERVER, 33...MUSIC DELIVERY SERVER, 34...CD STORE SERVER, 35...INTEGRATED SERVICE SERVER, 40...REMOTE CONTROLLER, 41a-41d...DIRECTION KEY, 42...CONFIRMATION KEY, 43a-43c...FUNCTION SELECTION KEY, 44...TOOL KEY, 45...RETURN KEY